ployment of the potent respiratory stimulant clonidine even when no anesthetics have been administered in anesthetized animals, and in the awake patient. The high dose of narcotics in the oral cavity may be a contributing factor to the respiratory depression observed when clonidine is used to supplement anesthetic agents. The use of clonidine in the awake patient requires careful monitoring of respiratory function. Since clonidine is a potent respiratory stimulant, it may cause significant respiratory depression in the awake patient. The use of clonidine in the awake patient requires careful monitoring of respiratory function. Since clonidine is a potent respiratory stimulant, it may cause significant respiratory depression in the awake patient.

References


R(obert) Mortimer Glover and the First Chloroform Anaesthesia

To the Editor:—Chloroform was independently discovered in 1831 by S. Guthrie, E. Souberian, and J. von Liebig. Soon after its discovery in the U. S., it was prescribed as a stimulant, analgesic, sedative, and especially a stimulant and bronchodilator, but its anesthetic properties remained unknown for another 15 years.

J. P. Flourens, who reported his experiments in dogs in March, 1847, is generally thought to have discovered the anesthetic properties of chloroform. J. Y. Simpson, after inhaling it during the memorable evening of November 4th, 1847, administered it in obstetrics on November 8th, 1847, and in surgery on November 12th, 1847, and immediately claimed credit for its discovery as an anesthetic. Simpson probably was unaware of Flourens' work and that chloroform or chloric ether, its alcoholic solution, had successfully been used for clinical anesthesia in London since at least February, 1847.

In fact the anesthetic properties of chloroform were found, although not appreciated, several years before 1847. R(obert) Mortimer Glover (1818-1859), a professor of Materia Medica at the Newcastle-upon-Tyne Medical School, reported in one of two papers that won him the Harveyan prize for 1842, that he had injected, respectively, 1.8 and 3.6 ml chloroform in the jugular vein of two large dogs and quickly caused unconsciousness, loss of corneal reflex and of response to pinching and pricking, motor weakness, and respiratory and circulatory depression, a state from which both animals quickly recovered. Two rabbits which received 3.6 ml chloroform in the peritoneum or the stomach showed the same symptoms but died 20 min later.

Glover did not try chloroform in smaller doses nor in inhalations, although he realized that the drug traversed his animals' alveoli after sniffing it on their breath. Glover also failed to see and exploit the clinical possibilities of the transient unconsciousness and analgesia he had produced in his two dogs. He was thus rather disingenuous when he claimed, after Simpson's discovery, that he had not recommended chloroform as an anesthetic because of its harmful pulmonary effects. He had been impressed, it is true, by the marked pulmonary congestion found in his autopsies and felt that chloroform was highly toxic to the lungs.

Glover's involvement with chloroform continued long after 1842. He assisted the surgeon Sir John Fife at the autopsy of Iannah Greener, the first victim of the chloroform, who died in Newcastle on January 28th, 1848. Glover's prejudice about chloroform pulmonary toxicity may well have influenced Fife's report that "in my opinion the cause
of death was the congestion of the lungs, and that congestion I ascribe to the inhalation of chloroform.** Glover also occasionally helped T. N. Meggison, Hannah Greener's anesthetist, administer chloroform in Newcastle.**

In 1849, Glover left Newcastle for London where he practiced as a "philosophical and practical chemist" at the Royal Free Hospital. He preceded two famous anesthetists at that hospital: B. W. Richardson, of bichloride of methylene fame, and E. F. Junker, the inventor of a vaporizer widely used in Europe for several decades.

Glover died under mysterious circumstances at the age of 45 in his Kesington home. In early April, 1859, he went into a coma after swallowing 2–3 ounces of chloroform and was found dead 24 hours later. His autopsy suggested chloroform as the cause of death. Glover had apparently swallowed the liquid in an experiment designed to induce anesthesia by the oral route. One of his obituaries praised Glover's "high reputation" and noted that "united with the playfulness and simplicity of an infant, he possessed powers of research, depth of thought, and originality of mind which fall to the lot of few labourers, even in the vast field of science." **

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REFERENCES


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Minimizing Dead Space, Air Embolism, and Needle-Stick Risk

To the Editor—Needle injections via latex T-ports attached directly to the peripheral intravenous cannula have been recommended during pediatric anesthesia to reduce dead space, risk of air injection/embolism, and fluid loads during drug administration. These injections frequently occur under drapes, encumbered by surgeons surrounding a small patient, and carry a considerable risk of blood-contaminated

![Fig. 1](http://anesthesiology.pubs.asahq.org/pdfaccess.ashx?url=/data/journals/jasa/931364/ on 01/16/2019)